



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/677,261	09/30/2000	Tony Hamilton	42390.P9737	2092

7590

03/23/2004

John P. Ward  
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP  
7th Floor  
12400 Wilshire Boulevard  
Los Angeles, CA 90025

EXAMINER

WANG, ALBERT C

ART UNIT

PAPER NUMBER

2115

DATE MAILED: 03/23/2004

13

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/677,261

Applicant(s)

HAMILTON, TONY

Examiner

Albert Wang

Art Unit

2115

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2003 and 05 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,3,5,6,8,9,19,21,23,24,26-28,30,32,33,35-37,39-42,44 and 45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,5,6,8,9,19,21,23,24,26-28,30,32,33,35-37,39-42,44 and 45 is/are rejected.
- 7) ☒ Claim(s) 1, 19 and 40 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This Office Action is responsive to Drawing Corrections filed September 8, 2003 and Pre-Amendment B filed March 5, 2004. Independent claims 1, 19, and 28 have been amended to respectively incorporate the limitations of canceled dependent claims 4, 22, and 31. Independent claim 37 has been amended to incorporate the limitations of pending dependent claim 40.
2. Applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections. In particular, the rejection of former dependent claims 4, 22, 31, and 40 is not addressed.

### ***Continued Examination Under 37 CFR 1.114***

3. All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

Art Unit: 2115

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### ***Drawings***

4. The drawings were received on September 8, 2003. These drawings are not unaccepted due to the objection listed below.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "14" has been used to designate both memory bus MBUS and system management bus SMBUS. The specification describes the MBUS and SMBUS as separate elements (page 5, lines 18-21). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

5. Claims 1 and 19 objected to because of the following informalities: "strenght" is misspelled. Appropriate correction is required.

6. Claim 40 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Independent claim 37 has been amended to incorporate the limitations of claim 40.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 1, 3, 5, 6, 9, 19, 21, 23, 24, 27, 28, 30, 32, 33, 36, 37, 39, 40-42, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evoy, U.S. Patent No. 5,787,294, in view of Cheung et al., U.S. Patent No. 6,564,329 ("Cheung"), further in view of Sakai, U.S. Patent No. 6,266,776, and further in view of Shu et al., U.S. Patent No. 5,457,407 ("Shu").

As per claim 1, Evoy teaches a method including:

dynamically adjusting, in response to a power management event, a voltage level and clock frequency level (Fig. 6, using programmable frequency generator 12 and programmable power supply 18) provided to a plurality of system components including a microprocessor (Fig. 6, CPU 14 and system components 16).

While Evoy teaches reducing power consumption in a portable computer (Abstract, notebook computer), by providing scalable voltage and frequency to system components (Claim 1) such as memory and system controllers (Claims 8 and 9), Evoy does not expressly teach the system components as system buses. Cheung teaches scaling power consumption in system components such as system buses (Abstract, "the on-chip memory, the memory controller, and the system bus are 'resources'"; Col. 8, lines 57-67, "select frequency of the bus clock"; Col. 6, lines 40-46, "bus clock is passed to the three buses"). At the time of the invention, it would have been obvious to one in the art to apply Cheung's system buses as system components in Evoy's method. A motivation for doing so would have been to improve power conservation by reducing power drain due to yet other system components.

Art Unit: 2115

Evoy/Cheung teaches a portable computer that operates from a battery source and inherently operates also from an external power source (Evoy, Col. 1, lines 9-14) but does not expressly teach detecting a power management event in a system that includes a change in a system power between an external power source and a battery source. Sakai teaches detecting change in system power source (Fig. 4, state transitions between S1 and S3; Col. 7, lines 14-61) and adjusting the performance states of a plurality of system components (Col. 1, lines 24-64). Both Evoy/Cheung and Saito are from the same field of endeavor involving power management. At the time of the invention, it would have been obvious to one of ordinary skill in the art to apply Sakai's detecting of power source to Evoy/Cheung's method. The motivation for doing so would have been to adjust power management according to power source (Sakai, Abstract).

While Sakai teaches chipsets as system components (Col. 1, lines 30-33) and Evoy/Cheung/Sakai teaches reducing power consumption due to system components, the combination does not expressly teach adjusting a chipset buffer strength. Shu teaches adjusting the buffer strength of a buffer to control power consumption (Abstract). At the time of the invention, it would have been obvious to one of ordinary skill in the art to apply Shu's adjusting of buffer strength to Evoy/Cheung/Sakai's method. A motivation for doing so would have been to implement impedance matching (Shu, Abstract).

As per claim 3, Sakai teaches chipsets as system components (Col. 1, lines 30-33). Cheung teaches a system component driving the system buses (Fig. 3, system clock controller 312).

As per claim 5, Evoy teaches a portable computer with a memory subsystem (Claim 9). Though Evoy is silent with regards to a graphics subsystem, a graphics subsystem is an integral

Art Unit: 2115

part of portable computers and necessary for the user interface (Col. 1, lines 9-14, notebook computer inherently has graphics display).

As per claim 6, Evoy teaches adjusting performance states of the plurality of components between a high level and a low level (Figs. 3 & 4, power use varies between zero and a hundred percent).

As per claim 9, Sakai teaches a deep sleep state (Col. 1, lines 24-64).

As per claims 19, 21, 23, 24, 27, since Evoy/Cheung/Sakai/Shu teaches the method of claims 1, 3, 5, 6, and 9, the combination teaches the claimed system.

As per claims 28, 30, 32, 33, and 36, since Evoy/Cheung/Sakai/Shu teaches the method of claims 1, 3, 5, 6, and 9, the combination teaches the claimed apparatus.

As per claims 37, 39, 40-42, and 45, since Evoy/Cheung/Sakai/Shu teaches the method of claims 1, 3, 5, 6, and 9, the combination teaches the claimed medium.

8. Claims 8, 26, 35, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evoy/Cheung/Sakai/Shu as applied to claims 1, 6, 19, 24, 28, 33, and 37 above, and further in view of Melo et al., U.S. Patent No. 6,040,845.

As per claims 8, 26, 35, and 44, Evoy/Cheung/Sakai/Shu does not expressly teach adjusting the performance state of a graphics subsystem by selecting one predetermined level from two predetermined AGP Specification graphics performance levels. Evoy does teach adjusting the performance level of a system component (Fig. 6) but does not teach the specifics of a graphics subsystem. Melo teaches a graphics subsystem (Fig. 1) and teaches graphics performance levels (Abstract, high and low power states). At the time of the invention, it would have been obvious to one of ordinary skill in the art to apply Melo's graphics subsystem to the

Art Unit: 2115

method of Evoy/Cheung/Sakai/Shu. A motivation for doing so would have been to minimize power consumption due to the graphics subsystems (Melo, Abstract).


***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Albert Wang whose telephone number is 703-305-5385. The examiner can normally be reached on M-F (9:30 - 6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas C. Lee can be reached on 703-305-9717. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

aw  
March 11, 2004

  
THOMAS LEE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100